

REMARKS/ARGUMENTS

The Present Invention

The present invention is directed to a method of real-time detecting and quantifying a first amplicon and a second amplicon in a PCR mixture.

The Pending Claims

Claims 9, 12, 15-18, 20, 21, 23, 26-28, 85, 87, and 90-114 are pending.

The Final Office Action and the Advisory Action

The rejection of claims 9, 11-18, 20-28, under 102 (e) as allegedly anticipated by U.S. Patent 6,472,156 (hereinafter the '156 patent) is maintained. The final Office Action additionally rejects claims 85-96 under 102 (e) as allegedly anticipated by the '156 patent.

The Advisory Action indicates that the amendments presented in the Reply filed on September 13, 2007, do not place the application in condition for allowance, since the '156 patent anticipates the claims as amended therein. Specifically, the Advisory Action states that the '156 patent teaches using a double stranded DNA intercalating dye in a method as claimed. Reconsideration of the rejection is hereby requested.

The Amendments to the Claims

The Advisory Action indicates that the amendments presented in the Reply filed on September 13, 2007, will not be entered. Accordingly, the amendments made herein include the amendments presented in the previous Reply, as well as additional amendments as discussed below.

Claims 9, 21, and 85 have been amended to incorporate the features of claims 11, 22, and 86, respectively. Claims 11, 22, and 86 have been canceled accordingly. Claims 12, 23, and 87 have been amended to change the dependencies in view of the cancellation of claims 11, 22, and 86. Claims 13, 14, 24, 25, 88, and 89 also have been canceled. All dependent claims have been amended to include a comma after the dependent claim number. Claims 9, 21, and 85 have been amended to include a comma after the term "mixture" in the first line of

(a). Claim 9 also has been amended to include a comma after the term “first T_m ” in the fourth line of (b). Furthermore, claims 9, 21, and 85 have been amended to recite “during each thermal cycle” in the first lines of (b) and (c) and to recite “a first amplicon and a second amplicon” in the preamble, which is supported by the specification at, for example, paragraph [0088], beginning on page 29. Claims 9 and 85 have been amended to recite “wherein the first measuring temperature is,” “wherein the second measuring temperature is,” and/or “wherein the third measuring temperature is” in (b). Claim 21 has been amended to recite “at a measuring temperature which is” throughout (b). Moreover, claim 96 has been amended to recite “are the same.”

Furthermore, claims 9, 21, and 85 have been amended to make clear that the emission readings obtained in (b) are used to quantify the first amplicon and second amplicon in (c), which is supported by the specification at, for instance, paragraphs [0088]-[0090].

Claims 97-114 have been added. Claims 97-99 are supported by the originally filed specification at, for example, paragraphs [0070] and [0072]. Claims 100-102 are supported by the originally filed specification at, for example, Figure 10. Claims 103-105 are supported by the originally filed specification at, for instance, paragraph [0072]. Claims 109-111 are supported by the originally filed specification at, for example, paragraphs [0088]-[0090]. Claims 112-114 are supported by the specification at, for instance, paragraph [0080]. No new matter has been added by way of these amendments.

Request for Telephonic Interview

In accordance with MPEP 713.02, Applicants hereby request that a telephonic interview be held with the examiner of the instant application before a first Official Action. The examiner is requested to contact the undersigned attorney to propose a date and time for the telephonic interview.

The Discussion of the Anticipation Rejection

Claims 9, 11-18, 20-28, and 85-96 stand rejected under 102 (e) as allegedly anticipated by the ‘156 patent.

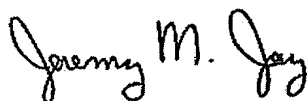
The instantly pending claims are directed to a method of real-time detecting and quantifying a first amplicon and a second amplicon in a PCR mixture. The method, in general, comprises (a) thermally cycling a PCR mixture, (b) obtaining during each thermal cycle a first emission reading of a double stranded DNA intercalating dye and a second emission reading of the double stranded DNA intercalating dye, (and optionally, up to two more emission readings (claims 21 and 85)), and (c) quantifying the first amplicon and second amplicon.

The rejection is traversed, because the '156 patent does not disclose each and every element of the instantly pending claims. Specifically, the '156 patent does not disclose a method of *quantifying* amplicons, whereas the method of the instantly pending claims requires quantifying the first amplicon and second amplicon. More specifically, the '156 patent does not teach (c) of each of claims 9, 21, and 85. Furthermore, the '156 patent does not teach the measuring temperatures of (b) at which the emission readings are obtained. Accordingly, the rejection cannot stand. Applicants therefore request that the withdrawal of the anticipation rejection be withdrawn.

Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



Jeremy M. Jay, Reg. No. 33,587
LEYDIG, VOIT & MAYER
Two Prudential Plaza, Suite 4900
180 North Stetson Avenue
Chicago, Illinois 60601-6731
(312) 616-5600 (telephone)
(312) 616-5700 (facsimile)

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